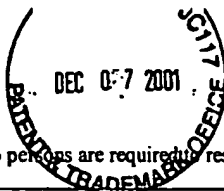


Please type a plus sign (+) inside the box ☒



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003


U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)				COMPLETE IF KNOWN	
				Application Number	09/915,204
				Filing Date	07/24/01
				First Named Inventor	Dialameh et al
				Group Art Unit	2621
				Examiner Name	Unknown <i>Marian D</i>
SHEET	1	OF	4	Docket Number	EYEM1240-1

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
<i>da</i>	1	4,725,824		Yoshioka	02/16/88	
	2	4,805,224		Koezuka et al	02/14/89	
	3	4,827,413		Baldwin et al	05/02/89	
	4	5,159,647		Burt	10/1992	
	5	5,168,529		Peregrin et al	12/01/92	
	6	5,187,574		Kosemura et al.	02/16/93	
	7	5,220,441		Gerstenberger	06/15/93	
	8	5,333,165		Sun	07/26/94	
	9	5,280,530		Trew et al	01/1994	
	10	5,333,165		Sun	07/26/94	
	11	5,383,013		Cox	01/17/95	
<i>da</i>	12	5,430,809		Tomitaka	07/04/95	
	13	5,432,712		Chan	07/11/95	

RECEIVED
 DEC 10 2001
 Technology Center 2600

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
	14	DE	4406020	C1				No
	15	EP	0807902	A2	Cyberclass Limited	11/1997		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ³
<i>da</i>	16	International Search Report for PCT/US99/07935	
	17	Akimoto, T., et al., "Automatic Creation of Facial 3D Models", IEEE Computer Graphics & Apps., pp.16-22, Sept. 1993.	
	18	Ayache, N. et al., "Rectification of Images for Binocular and Trinocular Stereovision", Proc. Of 9th Int'l. Conference on Pattern Recognition, 1, pp. 11-16, Italy, 1988.	
	19	Belhumeur, P., "A Bayesian Approach to Binocular Stereopsis", Int'l. J. Of Computer Vision, 19 (3), Pp.237-260, 1996.	
	20	Beymer, D. J., "Face Recognition Under Varying Pose", MIT A.I. Lab. Memo No. 1461, pp. 1-13, 12/93.	
	21	Beymer, D.J., "Face Recognition Under Varying Pose", MIT A.I. Lab. Research Report, 1994, pp. 756-761.	
	22	Buhmann, J. et al., "Distortion Invariant Object Recognition By Matching Hierarchically Labeled Graphs", In Proceedings IJCNN Int'l Conf. Of Neural Networks, Washington, D.C. June 1989, pp. 155-159.	
	23	DeCarlo, D., et al., "The integration of Optical Flow and Deformable Models with Applications to Human Face Shape and Motion Estimation", pp. 1-15, In Proc. CVPR '96, pp. 231-238 (published) [TM 18.9.96].	
<i>da</i>	24	Devemay, F. et al., "Computing Differential Properties of 3-D Shapes from Stereoscopic Images without (3-D) Models", INRIA, RR-2304, pp. 1-28, Sophia, Antipolis, 1994.	
	25	Dhond, U., "Structure from Stereo: a Review", IEEE Transactions on Systems, Man, and Cybernetics, 19(6), pp.1489-1510, 1989.	

Examiner Signature	<i>[Signature]</i>	Date Considered	4.15.04
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

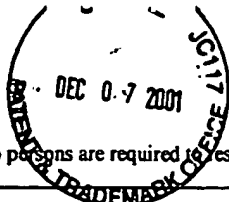
Please type a plus sign (+) inside the box ☒

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003

U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.



Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)				COMPLETE IF KNOWN	
				Application Number	09/915,204
				Filing Date	07/24/01
				First Named Inventor	Dialameh et al
				Group Art Unit	2621
				Examiner Name	USPTO MAR:AM,D
SHEET	2	OF	4	Docket Number	EYEM1240-1

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
da	26	5,511,153		Azarbayejani et al.	04/23/96	
	27	5,533,177		Wirtz et al.	07/02/96	
	28	5,550,928		Lu et al	08/1996	
	29	5,581,625		Connell	12/1996	
	30	5,588,033		Yeung	12/24/96	
	31	5,680,487		Markandey	10/21/97	
	32	5,699,449		Javidi	12/16/97	
	33	5,714,997		Anderson	02/03/98	
	34	5,715,325		Bang et al	02/03/98	
	35	5,719,954		Onda	02/17/98	
	36	5,736,982		Suzuki et al.	04/07/98	
	37	5,764,803		Jacquin et al.	06/09/98	
	38	5,774,591		Black et al.	06/30/98	
	39	5,809,171		Neff et al	09/15/98	
	40	5,828,769		Burns	10/27/98	
	41	5,802,220		Black et al	09/1998	
	42	5,917,937		Szeliski et al	06/1999	
	43	5,982,853		Liebermann	11/1999	
da	44	5,884,119		Cosatto et al	11/1999	
da	45	6,044,168		Tuceryan et al	03/2000	
da	46	6,052,123		Lecton et al	04/2000	

RECEIVED
 DEC 10 2001
 Technology Center 2600

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ³
da	47	Fleet, D.J., et al., "Computation of Component Image Velocity from Local Phase Information", <i>Int. J. Of Computer Vision</i> , 5:1, pp. 77-104 (1990).	
	48	Fleet, D.J., et al. <u>Measurement of Image Velocity</u> , Kluwer Academic Press, Boston, pp. 1-203, 1992.	
	49	Hall, E.L., "Computer Image Processing And Recognition", Academic Press 1979, 99. 468-484.	
	50	Hong, H., et al., "Online Facial Recognition based on Personalized Gallery", <i>Proceedings of Int'l Conference On Automatic Face And Gesture Recognition</i> , pp. 1-6, Japan April 1997	
	51	Kolocsal, P., et al, "Statistical Analysis of Gabor-Filter Representation, <i>Proceedings of International Conference on Automatic Face and Gesture Recognition</i> , 1997, 4 pp.	
	52	Kruger, N., "Visual Learning with a priori Constraints", <i>Shaker Verlag</i> , Aachen, Germany, 1998, pp. 1-131.	
	53	Kruger, N., et al, "Principles of Cortical Processing Applied to and Motivated by Artificial Object Recognition", <i>Institut fur Neuroinformatik, Internal Report 97-17</i> , Oct. 97, pp. 1-12.	
da	54	Kruger, N., et al, "Autonomous Learning of Object Representations Utilizing Self-Controlled Movements", 1998, <i>Proceedings of NN98</i> , 5 pp.	

Examiner Signature		Date Considered	4-15-04
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Please type a plus sign (+) inside the box ☒

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003

U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

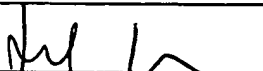
Substitute for form 1449A/PTO		COMPLETE & KNOWN			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)		Application Number	09/915,204		
		Filing Date	07/24/01		
		First Named Inventor	Dialameh et al		
		Group Art Unit	2621		
		Examiner Name	Unknown MARIAM D		
SHEET	3	OF	4	Docket Number	EYEM1240-1

RECEIVED
DEC 10 2001
Technology Center 2600

PTO
DEC 07 2001
U.S. PATENT & TRADEMARK OFFICE

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	¶
dp	55	Kruger, N., et al, "Object Recognition with a Sparse and Autonomously Learned Representation Based on Banana Wavelets", <i>Internal Report 96-11</i> , Institut fur Neuroinformatik, Dec. 96, pp. 1-24.	
	56	Kruger, N., et al, "Object Recognition with Banana Wavelets", <i>European Symposium on Artificial Neural Networks (ESANN97)</i> , 1997, 6 pp.	
	57	Kruger, N., "An Algorithm for the Learning of Weights in Discrimination Functions Using <i>a priori</i> Constraints", <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , Vol. 19, No. 7, July 1997, pp. 764-768.	
	58	Lades, M., et al, "Distortion Invariant Object Recognition in the Dynamic Link Architecture", <i>IEEE Transactions on Computers</i> , Vol. 42, No. 3, 1993, 11 pp.	
	59	Luong, Q. T., et al, "The Fundamental Matrix, Theory, Algorithm, and Stability Analysis", <i>INRIA</i> , 1993, pp. 1-46.	
	60	Manjunath, B. S., et al, "A Feature Based Approach to Face Recognition", In <i>Proceedings IEEE Conference on Computer Vision and Pattern Recognition</i> , pp. 373-378, 3/92.	
	61	Mauer, T., et al, "Single-View Based Recognition of Faces Rotated in Depth", In <i>Proceedings of the International Workshop on Automatic Face and Gesture Recognition</i> , pp. 248-253, Zurich, CH, June 26, 1995.	
	62	Mauer, T., et al, "Learning Feature Transformations to Recognize Faces Rotated in Depth", In <i>Proceedings of the International Conference on Artificial Neural Networks</i> , Vol. 1, pp. 353-358, Paris, France, October 9-13, 1995.	
	63	Mauer, T., et al, "Tracking and Learning Graphs and Pose on Image Sequences of Faces", <i>Proceedings of 2nd International Conference on Automatic Face and Gesture Recognition</i> , October 14-16, 1996, pp. 176-181.	
	64	Maybank, S. J., et al, "A Theory of Self-Calibration of a Moving Camera", <i>International Journal of Computer Vision</i> , 8(2), pp. 123-151, 1992.	
	65	McKenna, S.J., et al, "Tracking Facial Feature Points With Gabor Wavelets and Shape Models, (publication & date unknown)", 6 pp.	
	66	Okada, K., et al, "The Bochum/USC Face Recognition System", 19 pp. (publication & date unknown).	
	67	Okutomi, M., et al, "A Multiple-Baseline Stereo", <i>IEEE Trans. on Pattern Analysis and Machine Intelligence</i> , Vol. 15, No. 4, pp. 353-363, Apr. 1993.	
	68	Peters, G., et al, "Learning Object Representations by Clustering Banana Wavelet Responses", <i>Tech. Report IR-INI 96-09</i> , Institut fur Neuroinformatik, Ruhr Universitat, Bochum, 1996, 6 pp.	
	69	Phillips, P. J., et al, "The Face Recognition Technology (FERET) Program", <i>Proceedings of Office of National Drug Control Policy, CTAC International Technology Symposium</i> , August 18-22, 1997, 10 pages.	
	70	Pighin, F., et al, "Synthesizing Realistic Facial Expressions from Photographs", In <i>SIGGRAPH 98 Conference Proceedings</i> , pp. 75-84, July 1998.	
	71	Roy, S., et al, "A Maximum Flow Formulation of the N-Camera Stereo Correspondence Problem", <i>IEEE, Proceedings of International Conference on Computer Vision</i> , Bombay, India, Jan. 1998, pp. 1-6.	
	72	Sara, R. et al "3-D Data Acquisition and Interpretation for Virtual Reality and Telepresence", <i>Proceedings IEEE Workshop Computer Vision for Virtual Reality Based Human Communication</i> , Bombay, Jan. 1998, 7 pp.	
	73	Sara, R. et al "Fish-Scales: Representing Fuzzy Manifolds", <i>Proceedings International Conference Computer Vision, ICCV 98</i> , pp. 811-817, Bombay, Jan. 1998.	
	74	Sara, R., et al, "On Occluding Contour Artifacts in Stereo Vision", <i>IEEE, Proceedings of International Conference Computer Vision and Pattern Recognition</i> , Puerto Rico, 1997, 6 pp.	
	75	Steffens, J., et al, "PersonSpotter - Fast and Robust System for Human Detection, Tracking, and Recognition", <i>Proceedings of International Conference on Automatic Face and Gesture Recognition</i> , 6 pp., Japan - April 1998.	
dp	76	Theimer, W. M., et al, "Phase-Based Binocular Vergence Control and Depth Reconstruction using Active Vision", <i>CVGIP: Image Understanding</i> , Vol. 60, No. 3, Nov. 1994, pp. 343-358.	

Examiner Signature		Date Considered	4-15-04
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

†Unique citation designation number. ‡See attached Kinds of U.S. Patent Documents. §Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ¶For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ¶Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ¶Applicant is to place a check mark here if English language translation is attached.

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003


U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

SUBSTITUTE FOR FORM 1443A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)				COMPLETE IF KNOWN	
				Application Number	09/915,204
				Filing Date	07/24/01
				First Named Inventor	Dialameh et al
				Group Art Unit	2621
				Examiner Name	Unknown mne-an, D
SHEET	4	OF	4	Docket Number	EYEM1240-1

DEC 9 7 2001
 PATENT & TRADEMARK OFFICE

[illegible]

Examiner Signature		Date Considered	4-15-04
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Please type a plus sign (+) inside the box ☒

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003
U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		COMPLETE IF KNOWN	
		Application Number	09/915,204
		Filing Date	July 24, 2001
		First Named Inventor	Dialameh et al.
		Group Art Unit	2621
		Examiner Name	Unknown MARIAM , D
SHEET 1	OF 1	Docket Number	EYEM1240-1

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
dk		6,011,562		Gagné	01-04-2000	

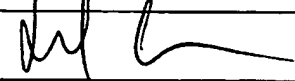
RECEIVED

DEC 17 2002

Technology Center 2600

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
dk		PCT	WO99/53443		Eyematic Interfaces, Inc.	10-21-1999		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
dk		Notification of Transmittal of the International Search Report or the Declaration, International Search Report for PCT/US02/23973, mailed 18 November 2002	
dk		VALENTE, Stephanie et al., "A Visual Analysis/Synthesis Feedback Loop for Accurate Face Tracking", Signal Processing Image Communication, Elsevier Science Publishers, Vol. 16, No. 6, February 2001, pages 585-608	
dk		YANG, Tzong Jer, "Face Analysis and Synthesis", June 1, 1999, Retrieved from Internet, http://www.cmlab.csie.ntu.edu.tw/ on 25 October 2002, 2 pg.	
dk		YANG, Tzong Jer, "VR-Face: An Operator Assisted Real-Time Face Tracking System", Communication and Multimedia Laboratory, Dept. of Computer Science and Information Engineering, National Taiwan University, June 1999, pgs.1-6	

Examiner Signature		Date Considered	4-15-04
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.